

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-14 (canceled)

1 Claim 15 (new): A method for protecting a portable card,
2 provided with a cryptographic algorithm for enciphering data
3 and/or authenticating the card, against deriving a secret
4 key used in the card from statistical analysis of
5 information leaking away from the card to an outside world
6 in the event of cryptographic operations performed by the
7 card, the card being provided with at least a shift register
8 having linear and non-linear feedback functions for
9 implementing cryptographic algorithms, the method comprising
10 the steps of:

11 loading data to be processed and a secret key into the
12 shift register of the card; and

13 controlling the linear and non-linear feedback
14 functions in such a manner that collection of values of
15 recorded leak-information signals is resistant to deriving
16 the secret key through said statistical analysis of the
17 values.

1 Claim 16 (new): The method recited in claim 15 wherein said
2 manner comprises invoking the linear and non-linear feedback
3 functions in a predefined sequence.

1 Claim 17 (new): The method recited in claim 15 wherein the
2 information leaking away to the outside world comprises
3 either power-consumption data or electromagnetic radiation.

1 Claim 18 (new): The method recited in claim 15 further
2 comprising the steps of:
3 after the key has been loaded into the shift register,
4 clocking the shift register several times, during a specific
5 period, using at least the linear-feedback function;
6 then loading data into the shift register only using
7 the linear-feedback function; and
8 subsequently clocking the shift register.

1 Claim 19 (new): The method recited in claim 18 further
2 comprising the step of:
3 during a first instance of clocking the shift register,
4 clocking the shift register for a sufficiently long time
5 such that the contents of all elements of the shift register
6 largely depend on bits of the key.

1 Claim 20 (new): The method recited in claim 18 further
2 comprising the steps of:
3 after the key has been loaded into the shift register,
4 disconnecting the data from an input to the shift register;
5 and
6 after the specific period has occurred, reconnecting
7 the data to the input of the shift register so that the data
8 can then be loaded into the shift register.

1 Claim 21 (new): The method recited in claim 15 further
2 comprising the step of:

3 after the key has been loaded into the shift register,
4 clocking the shift register, during a specific period,
5 several times, with the linear and non-linear feedback
6 functions of the shift register being active but no data
7 being loaded into the shift register during or prior to the
8 clocking or prior to loading the key.

1 Claim 22 (new): The method recited in claim 21 further
2 comprising the steps of:

3 after the key has been loaded into the shift register,
4 disconnecting the data from an input to the shift register;
5 and

6 after the specific period has occurred, reconnecting
7 the data to the input to the shift register so that the data
8 can then be loaded into the shift register.

1 Claim 23 (new): The method recited in claim 15 further
2 comprising the step of:

3 loading the key into the shift register with both the
4 linear and non-linear functions being active and only when
5 the contents of the shift register are fixed.

1 Claim 24 (new): The method recited in claim 15 further
2 comprising the steps of:

3 if the key is not been loaded into the shift register
4 while the contents of the shift register are fixed, loading

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5 the key into the shift register using only the linear
6 feedback function; and
7 then clocking the shift register.